



**Report of a Pest Risk Analysis
for American plum borer, *Euzophera semifuneralis***

PRA report prepared by the EPPO Secretariat and reviewed by the Panel on Phytosanitary Measures and the Panel on Quarantine Pests for Forestry



Adult of *Euzophera semifuneralis*. Courtesy: Dalia Del Nista, Tuscany's Phytosanitary Service. Port of Leghorn (IT) – <https://gd.eppo.int/taxon/EUZOSE> (EPPO Code: EUZOSE).

PRA area: EPPO region in 2026-09.

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Following this PRA report, *Euzophera semifuneralis* was not added to the EPPO A1/A2 Lists of pests recommended for regulation as quarantine pests in 2026, and therefore no risk management measures were proposed. It was considered that *E. semifuneralis* poses only limited risk to the EPPO region as it is currently considered in North America to be only a secondary/opportunistic borer associated with preexisting damage or tree stress.

Introduction

The aim of this PRA report is to assess the status of *Euzophera semifuneralis* as a candidate for listing on the EPPO A1 or A2 Lists of pests recommended for regulation as quarantine pests. EPPO recommendations for regulation are normally made either on the basis of EPPO Pest Risk Analyses (PRAs) prepared by Expert Working Groups (EWGs) or PRAs developed by EPPO member countries for the EPPO region, or PRA reports based on national PRAs or EFSA PRAs. The present PRA report is based on an EFSA pest categorization (EFSA PLH Panel, 2023a), which was initiated following the EFSA commodity risk assessments of *Juglans regia*, *Malus domestica*, *Prunus persica* and *P. dulcis* plants for planting from Türkiye (EFSA PLH Panel, 2021, 2022, 2023b). In these documents *E. semifuneralis* was identified as a relevant non-regulated EU pest which could potentially enter the EU on these pathways. In addition, the PRA report includes responses from experts and a targeted literature search conducted to make it more representative to the whole EPPO region and to update the analysis. All data that are not in EFSA pest categorization (EFSA PLH Panel, 2023a) are cited as ‘complement, 2026-03’.

In the absence of a PRA using rating scales, the Panel on Phytosanitary Measures assessed the likelihood of entry and establishment as either likely or unlikely. The magnitude of spread and impact was assessed on a five-level scale (very low, low, moderate, high, very high). Each rating was accompanied by a three-level uncertainty (low, moderate, high).

The PRA report was presented to the meeting of the Panel on Phytosanitary Measures in 2025-10 and 2026-03, and to the meetings of the Panel on Quarantine Pests for Forestry in 2025-11. The Panel on Phytosanitary Measures decided to not recommend the addition of *E. semifuneralis* to the EPPO A1 or A2 Lists of pests recommended for regulation as quarantine pests, and therefore to not propose risk management measures. The main reason for not recommending *E. semifuneralis* for regulation was the low magnitude of impact expected on cultivated and native hosts in the EPPO region, with a moderate uncertainty. EPPO Working Party on Phytosanitary Regulations and EPPO Council agreed in 2026 that *E. semifuneralis* should not be added to the EPPO A1 or A2 List of pests recommended for regulation as quarantine pests.

Stage 1: Initiation

Reason for doing the PRA

E. semifuneralis, the American plum borer, is a highly polyphagous pyralid moth native to North America (hosts are in 22 genera in 16 families), reported from USA, Canada, and

Mexico. Out of its native range it is only present in Türkiye (first reported in 2009). It completes 1–3 generations per year in its native range. *E. semifuneralis* is generally known as a pest of trees affected by mechanical injuries, frost or canker diseases since larvae are unable to attack trees with undamaged bark. The pest was added to the EPPO Alert List in 2025-01.

At its meeting in March 2025, the Panel on Phytosanitary Measures decided that a PRA report should be prepared for *E. semifuneralis* (priority 1). At its meeting in June 2025, the Working Party on Phytosanitary Regulations agreed (keeping the same priority).

Taxonomic position of the pest

Pest: Arthropoda, Insecta, Lepidoptera, Pyralidae, Euzophera, *Euzophera semifuneralis* (Walker).

Other scientific names (if any): *Nephopteryx semifuneralis* (the name at the stage of the original description).

English common name: American plum borer.

EPPO code: EUZOSE.

There is no uncertainty on the taxonomic position of the pest reported in the literature. However, recent molecular (COI) analysis shows that the three taxa (*E. semifuneralis*, *E. habrella*, and *E. aglaeella*) cluster together in a paraphyletic group, making reliable species-level identification difficult (S. Teekema, NIVIP/NVWA NL, pers. comm., 2025; complement, 2026-03). Morphological differences are described in the literature, but they are not always consistently observable, especially in damaged specimens. *E. habrella* and *E. aglaeella* are also poorly studied and rarely recorded species, with limited biological, ecological, and genetic information available. Some uncertainty may also stem from possible misidentifications of deposited specimens in genetic databases. Overall, COI barcoding of a single gene alone may be insufficient to clearly separate these taxa. As a result, the exact taxonomic boundaries and reliable identification of these species remain uncertain and require further investigation (complement, 2026-03).

Stage 2: Pest Risk Assessment

2.1. Likelihood of introduction

2.1.1. Entry

2.1.1.1. Geographical distribution

E. semifuneralis is native to **North America** and is reported from the USA, Canada, and Mexico. Out of its native range it is only present in **Europe** (Türkiye; **Fig. 1**). An updated distribution of the pest can be found in the EPPO Global Database ([EPPO, 2026](#), Hosts).

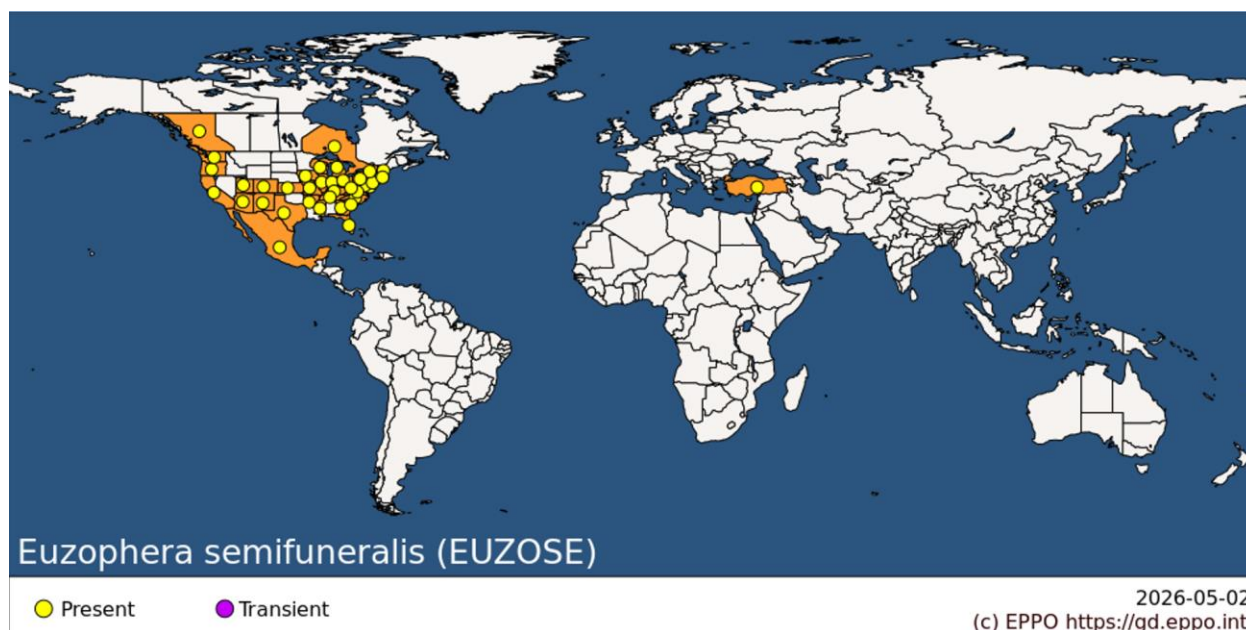


Fig. 1. Geographical distribution of *Euzophera semifuneralis* (EUZOSE). Source: EPPO (2026) EPPO Global Database. Retrieved from [EPPO, 2026](https://gd.eppo.int) (Distribution, as per 2026-05-02). Legend: Data on presence of the pest are shown at country level by displaying a bright yellow dot together with an orange background. For large countries, geographical data are given as far as possible at provinces/state level.

2.1.1.2. Host plant(s)

Known hosts belong to 16 plant families (including Fagaceae, Juglandaceae, Oleaceae, Platanaceae, Rosaceae, Ulmaceae) and 22 genera (including *Juglans*, *Morus*, *Olea*, *Populus*, *Prunus*, *Pyrus*, *Quercus*, *Sorbus*). The main hosts reported are plum and cherries *Prunus* spp. [Wilson, 2019; complement, 2026-03], but the pest can feed also on olive *Olea europaea*, apricot *Prunus armeniaca*, almond *P. dulcis*, and apple *Malus domestica*. In Türkiye, damage to pomegranate *Punica granatum* is reported (EFSA PLH Panel, 2023a citing Atay and Öztürk, 2010).

An updated and complete list of host plants is available in the EPPO Global Database ([EPPO, 2026](https://gd.eppo.int); Hosts).

2.1.1.3. Likely pathways of entry

The EFSA pest categorization (EFSA PLH Panel, 2023a; Table 3) considered the following **potential pathways** of entry of *E. semifuneralis* (naming of the pathways was adapted in coherence with Guidance for Standard PM 5/5 *Decision-Support Scheme for an Express Pest Risk Analysis*; EPPO, 2012): plants for planting; tubers of *Ipomoea batata*; solid wood

packaging material; woody host plants for planting (excluding seeds); cut branches; round wood with bark.

Among them, the following pathways were considered as **main ones**: plants for planting, wood with bark, and wood products (EFSA PLH Panel, 2023a; Table 9). Indeed, for these pathways, all life stages are associated with host plants: in particular, eggs are laid on twigs/young stems or in cracks/crevices of the bark, larvae bore into bark and mine irregular galleries in the cambium. The pest overwinters as mature larva in a white silken cocoon under the bark.

Plants for planting of *E. semifuneralis* hosts (except seed, pollen and tissue culture)

The minimum diameter of stems of hosts suitable for oviposition and development of the pest is not known. Early stages of infestation might be difficult to detect if only a small number of individuals are present.

Heavy infestations are not expected on plants for planting, because signs (first of all large amounts of frass produced and excavated out of galleries by larvae) are likely to be detected through quality inspection procedures prior to dispatch. Plants for planting are normally subject to controls during production, and attacked plants may be detected and discarded. However, a small proportion of plants, especially with eggs and younger larvae might be overlooked.

No interceptions of *E. semifuneralis* on plants for planting are reported worldwide.

Importing plants for planting of certain hosts from some countries where the pest is present into some EPPO member countries is prohibited, e.g. plants of *Quercus* spp. and *Populus* spp. from the USA, Canada, and Mexico into the EU (EU 2019: Commission Implementing Regulation (EU) 2019/2072, Annex VI; EFSA PLH Panel, 2023a, Table 2). *Malus* spp. and *Prunus* spp. are considered high risk plants and their importation into the EU from the area of current pest distribution is also prohibited pending a risk assessment (EU 2018: EU Commission Implementing Regulation (EU) 2018/2019, Annex I). Import of some other host plants for planting into the EU is possible.

Importing *Prunus persica*, *P. dulcis*, *P. armeniaca*, and *P. davidiana* plants for planting from Türkiye into the EU is restricted to up to 2-year-old bare-rooted plants, dormant and free of leaves. Importing *M. domestica* plants for planting from Türkiye to the EU is restricted to bare-rooted plants, dormant, free of leaves, and with a maximum stem diameter of 3 cm. Importing *Juglans regia* plants for planting from Türkiye to the EU is restricted to two-year-old bare-rooted plants, free of leaves, and with a maximum diameter of 2 cm at the base of the stem. These plants should be (i) free from *E. semifuneralis*; (ii) from a pest-free place of production (iii) subjected to inspection for *E. semifuneralis* prior to export with such a sample size as to enable at least the detection of 1 % level of infestation with a level of confidence of 99 %, and to an official inspection and systematic random sampling (EU 2022: Commission Implementing Regulation (EU) 2022/490; EU 2024a: Commission

Implementing Regulation (EU) 2024/1162; EU 2024b: Commission Implementing Regulation (EU) 2024/1457; complement, 2026-03).

Import of host plants for planting of *E. semifuneralis* into the member countries of the Eurasian Economic Union (EAEU) is not prohibited, and *E. semifuneralis* is not currently a quarantine pest for the EAEU (EAEU, 2016a,b).

Even with restrictions outlined above, the scale of trade in the EPPO region of plants for planting of numerous hosts of *E. semifuneralis* is significant in volume (Eschen *et al.*, 2017; complement, 2026-03).

In conclusion, entry of *E. semifuneralis* on plants for planting (except seed, pollen, tissue culture) on confirmed hosts of *E. semifuneralis* is considered likely with low uncertainty.

Round and sawn wood of *E. semifuneralis* hosts with bark

Wood with bark has been considered a suitable pathway for *E. semifuneralis* (Korycinska, 2018).

Infestations of round and sawn wood of *E. semifuneralis* hosts with bark might be detected through quality inspection procedures prior to dispatch because the main signs should be visible, e.g. large amounts of frass produced and excavated out of galleries by larvae, open galleries or resting or ovipositing adults.

Processes applied to produce sawn wood would destroy significant proportion of individuals of *E. semifuneralis* in galleries, because the bark is mostly removed in sawn wood. Secondary colonization of material is very unlikely as the pest needs bark and fresh cambium for feeding. If *E. semifuneralis* survives the process of sawing, it would then need to survive transport and storage. The sawn wood may become mostly unsuitable, and surface of bark is limited for larvae to complete development. However, sawn wood with large pieces of bark may still be suitable for pest development. Successful transfer to a suitable host is less likely than from plants for planting (complement, 2026-03).

Importing round and sawn wood with bark of some hosts of *E. semifuneralis* into the EU is prohibited from some countries where the pest is present (e.g., wood of *Quercus* spp. from the USA or wood of *Populus* spp. from the Americas (EU 2019: Commission Implementing Regulation (EU) 2019/2072, Annex VI, sections 90 and 95).

In the EPPO region, the volume of trade in round and sawn wood of at least some hosts of *E. semifuneralis* is significant in size (e.g. in 2023, *Prunus* spp. – about 570 t [the data likely include not all related custom codes]; [Eurostat, 2025](#)).

There are two interception records of *E. semifuneralis* larvae in the Europhyt and TRACES databases. Both interceptions were reported in Italy on imported wood material (logs) from the US on *Prunus* sp., *Tilia* sp. and *Liriodendron tulipifera* (not considered as host) in 2017 and 2020 (I. Bernardinelli, NPPO of Italy, pers. comm., 2025; V. Kertész, EFSA, pers. comm., 2025; complement, 2026-03).

Import of round and sawn wood with bark of *E. semifuneralis* into the member countries of the EAEU is not prohibited, and *E. semifuneralis* is not currently a quarantine pest for the EAEU (EAEU, 2016a,b).

In conclusion, entry of *E. semifuneralis* on round and sawn wood with bark of hosts of *E. semifuneralis* is considered likely with moderate uncertainty (proportion of round and sawn wood traded that would be fresh enough, transfer).

Cut branches of *E. semifuneralis* hosts

The EFSA pest categorization (EFSA PLH Panel, 2023a) listed cut branches among potential pathways (Table 3) but did not include cut branches in the list of the main pathways (Table 9). All life stages of *E. semifuneralis* might be associated with cut branches. The minimum diameter of branches suitable for oviposition and development of the pest is not known.

Most of fresh cut branches traded internationally are used as decorative or floristry supply and expected to be of good quality; signs of infestation by *E. semifuneralis* would be noticed (complement, 2026-03).

Massive infestations of cut branches by *E. semifuneralis* are not expected, especially because the pest (except very young larvae) is mostly associated with stems rather than branches and because signs (first of all large amounts of frass produced and excavated out of galleries by larvae) may be detected and discarded through quality inspection procedures prior to dispatch. However, a small proportion of individuals might be overlooked, although it is unlikely that they would be able to complete their life cycle (complement, 2026-03).

No interceptions of *E. semifuneralis* on cut branches are reported worldwide.

Contrary to plants for planting, transfer would be needed. When cut branches are used indoors, *E. semifuneralis* is unlikely to be able to transfer easily to a suitable host (complement, 2026-03).

In conclusion, entry of *E. semifuneralis* on cut branches of hosts is considered likely with moderate uncertainty (cut branches diameter in trade and diameter allowing complete development, transfer), but likelihood is lower than for plants for planting or round and sawn wood with bark.

Unlikely pathways

Bark of *E. semifuneralis* hosts

The EFSA pest categorization (EFSA PLH Panel, 2023a) listed wood products among the main pathways (Table 9). Isolated bark was not listed specifically, but can be a potential pathway (complement, 2026-03). All life stages of *E. semifuneralis* are associated with bark of growing

trees, but removed from the stem and isolated, bark might quickly become dry and unsuitable for development of the pest and exposed larvae will likely die (complement, 2026-03).

Isolated bark might be imported for extraction of tannins (e.g., from chestnut or oak bark), mulch production, use in horticultural substrates (complement, 2026-03) or for medical purposes (other species of *Prunus*, not hosts of *E. semifuneralis*; Cunningham et al., 2016; complement, 2026-03).

Processes applied to produce and store bark as a commodity (e.g. debarking) are likely to destroy most individuals of *E. semifuneralis* and during these processes the pest may be detected (complement, 2026-03). Infestations of bark of *E. semifuneralis* hosts can be detected through quality inspection prior to dispatch because larval galleries will be fully visible (complement, 2026-03).

Importing isolated bark of *Quercus* spp. other than *Quercus suber*, and of *Populus* spp. from Canada, Mexico, and the USA into the EU is prohibited (EU, 2019: EU Commission Implementing Regulation (EU) 2019/2072, Annex VI; EFSA PLH Panel, 2023a).

Data are not available to evaluate the amount of trade in bark of *E. semifuneralis* hosts from the countries where the pest present to the EPPO region (complement, 2026-03).

In conclusion, entry of *E. semifuneralis* on bark of hosts is considered unlikely with moderate uncertainty concerning survival of the pest on isolated bark and amount of international and intercontinental trade.

Wood packaging material (WPM)

WPM used for international trade is produced from debarked wood (with a specified tolerance for remaining bark) and should be appropriately treated (ISPM 15: IPPC, 2021). Processes applied to produce WPM would destroy most (if not all) individuals and galleries. Dry wood with a small amount of bark is very unlikely to be a substrate for development of *E. semifuneralis*. Secondary colonization of WPM after treatment is unlikely (to impossible) when WPM treatment criteria are satisfied, given that *E. semifuneralis* depends on live or freshly dead plant food material. Requiring treatment with ISPM 15 should be sufficient, and this pathway is not considered further (complement, 2026-03).

Wood chips, processing wood residues, hogwood

Processes applied to produce such commodities would destroy all or nearly all individuals of *E. semifuneralis* in galleries. As for WPM, secondary colonization of material is unlikely because *E. semifuneralis* depends on live or freshly dead plant material. If *E. semifuneralis* survives processing into wood chips or similar, it would then need to survive transport and

storage. The wood may become unsuitable, and pieces of wood are too small at least for larvae to make galleries. Successful transfer to a suitable host is also unlikely (complement, 2026-03).

Tubers of *Ipomoea batatas*

Sweet potato (*I. batatas*) is mentioned at least once in the literature as a host of *E. semifuneralis* (Biddinger, Howitt, 1992), but with a remark ‘*stored tubers only*’ suggesting that this record was not from the field where the pest can normally complete its life cycle. Furthermore, the pest is normally associated with bark and it is unlikely that it can properly develop in a non-woody plant (complement, 2026-03).

All other pathways listed in the EPPO (2024) Guidelines on Pest Risk Analysis are considered unlikely or irrelevant for entry of *E. semifuneralis* in the EPPO region and not discussed further.

Overall, entry of E. semifuneralis in the EPPO region is expected to be likely with low uncertainty.

2.1.2. Potential establishment

2.1.2.1. Plant(s) at risk

Establishment of *E. semifuneralis* in the EPPO region would not be constrained by host availability (complement, 2026-03), because *E. semifuneralis* is highly polyphagous (see section 2.1.1.2). The main hosts of *E. semifuneralis* are widely distributed in the EPPO region: they grow naturally and are widely cultivated in most EPPO countries. In 2017–2021, in the EU Member States, the total crop area of the main hosts of *E. semifuneralis* (olives, almonds, apples, cherries, peaches, plums, pears, apricots) was annually apr. 70 million ha (EFSA PLH Panel, 2023a). Similar data for EAEU are not available but the main hosts of *E. semifuneralis* are widely distributed and massively cultivated there (complement, 2026-03).

2.1.2.2. Climatic suitability

EFSA pest categorization (EFSA PLH Panel, 2023a) indicated that there are 10 Köppen-Geiger climate types which occur in the countries where *E. semifuneralis* had been reported and in the EU (**Fig. 2**). The most relevant Köppen-Geiger climate types are **Cfa** (temperate, humid sub-tropical), **Csb** (warm-summer, Mediterranean), and **Dfb** (warm-summer, humid continental) (**Fig. 2**). These three climate types are widely present in the EU as well as in

some other EPPO member countries, e.g. Türkiye (where the pest is present), Serbia, Ukraine, Belarus, Russia, Georgia, Azerbaijan, etc. (see 2.1.2.4; complement, 2026-03). Note that platform GBIF (as of 2025-10) indicates a somewhat wider distribution of *E. semifuneralis* than it is shown in **Fig. 2**, although its native range remains confined to the same three major climate types and three countries (<https://www.gbif.org/species/1875407>).

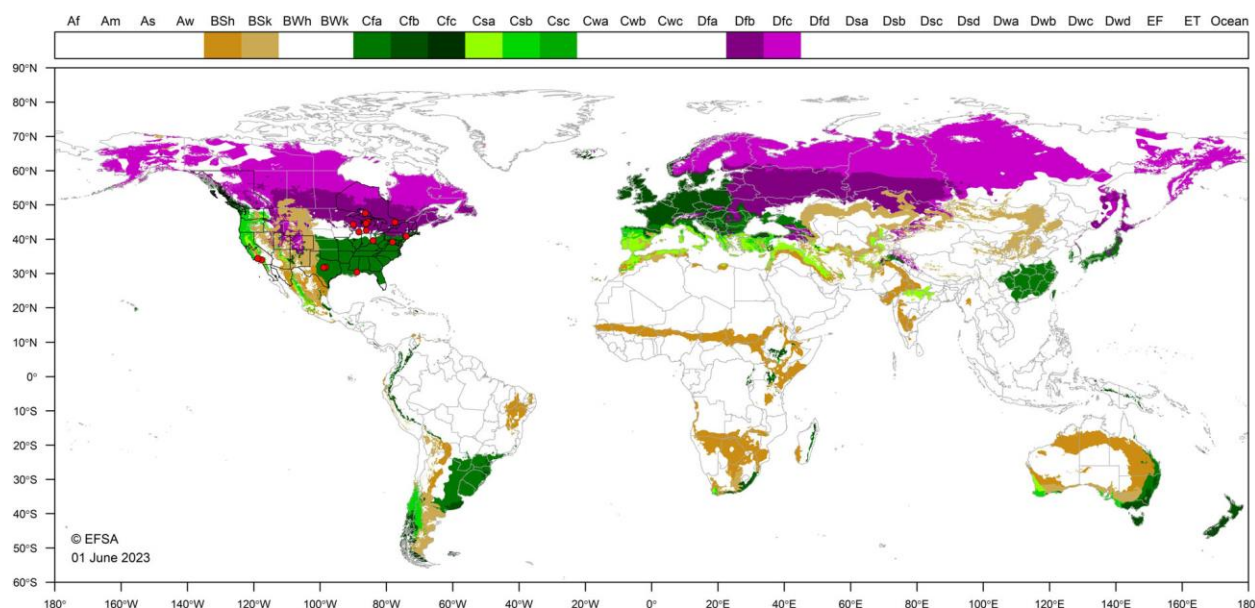


Fig. 2. World distribution of 10 Köppen-Geiger climate types that occur in the EU, and which occur in countries where *Euzophera semifuneralis* has been reported. Red dots indicate point locations where *E. semifuneralis* was reported (EFSA PLH Panel, 2023a).

In conclusion, climate in many parts of the EPPO region is considered suitable for establishment of *E. semifuneralis*. Nevertheless, there is an uncertainty about how far north *E. semifuneralis* could establish in colder areas of the EPPO region, as nothing is known about temperature requirements of the species (complement, 2026-03).

Protected conditions (indoors, e.g. in nurseries) are of limited relevance for establishment of *E. semifuneralis* because hosts are usually grown there for limited time period as young plants for planting. In general, such conditions are milder and, thus, would likely favour establishment of *E. semifuneralis*. Additionally, plants are more frequently inspected there and the pest is more likely to be noticed (complement, 2026-03).

2.1.2.3. Other characteristics for establishment

Other characteristics that can affect establishment are not found in the available literature.

2.1.2.4. Areas and likelihood of potential establishment

Based on the distribution of the Köppen-Geiger climate types (**Fig. 2**), the area of potential establishment of *E. semifuneralis* in the EPPO region is wide. Establishment may occur, e.g. in Southern and Eastern Europe, parts of the Russian Federation, the Caucasus, and coastal area in North Africa where hosts are present (complement, 2026-03). It is not known if *E. semifuneralis* can establish in other parts of the EPPO region (complement, 2026-03).

Protected conditions are likely to provide a suitable environment for *E. semifuneralis* (complement, 2026-03).

2.1.3. Magnitude of spread

Natural spread by flying adults can occur, although, there are no records of any species of *Euzophera* being a long-distance migrant (Korycinska, 2018). All stages of *E. semifuneralis* can be moved over long distances via infested plant material (e.g. plants for planting, and round and sawn wood with bark). Plants for planting provide the main spread mechanism for *E. semifuneralis* over long distances. It is unlikely that availability of hosts will limit spread in the EPPO region.

In conclusion, the magnitude of spread of *E. semifuneralis* in the EPPO region is likely to be moderate with high uncertainty (absence of data for natural spread distance).

2.2. Potential Impact

2.2.1. Nature of the damage

Signs of pest presence are not specific; they are usually seen on stems and branches in the lower part of the stem. The main sign is a remarkable accumulation of frass (larval excrement mixed with sap exudates and silky threads) on the bark. By removing the bark, larval galleries full of frass, larvae and/or white cocoons can be easily observed. In pomegranate, *E. semifuneralis* often feeds by opening galleries, especially close to the root collar of young trees and under the bark of the trunks and branches of older trees. Signs should be quite easy to detect (EFSA PLH Panel, 2023a).

Euzophera semifuneralis is generally known as a pest of trees bearing some sort of wounds. These could be mechanical injuries (e.g. caused by orchard mowers or trunk or limb shakers used for mechanical harvest), an effect of various diseases or grafting bounds. It is believed that the larvae are unable to attack trees with undamaged bark. Larval feeding in the cambium often causes girdling of stems and death of young trees (EFSA PLH Panel, 2023a citing Solomon & Payne, 1986; Biddinger & Howitt, 1992); infestation on young pecan trees has led to death of the young trees or crotch splitting later in the life of the tree (EFSA PLH Panel, 2023a citing Pierce and Nickels, 1941).

2.2.2. Impact within the current area of distribution

Larvae feed horizontally and high populations of plum borer larvae are capable of girdling and killing full-grown trees in less than 10 years (EFSA PLH Panel, 2023a citing Biddinger & Howitt, 1992). *E. semifuneralis* was considered an important contributor to a reduction (from 30 to 20 years) in the life span of the average tart cherry orchard in Michigan, USA, where the species was considered as a pest (EFSA PLH Panel, 2023a citing Kain & Agnello, 1999). Its feeding can lead to cankers and rots by providing suitable entryways for other pathogens (EFSA PLH Panel, 2023a citing Kain & Agnello, 1999).

E. semifuneralis was reported to damage mainly plum and cherry orchards in the USA, while it was also quoted as sporadic pest in young almond orchards. Vigorous trees rarely suffer serious damage, but infested branches can break under the action of the wind (EFSA PLH Panel, 2023a citing Pollack, 1998). Besides, it was also reported as a pest in the pruning wounds of pecan and walnut ('walnut gridler') but not able to infest healthy, uninjured trees.

Before the 1970s, *E. semifuneralis* was occasionally seen in plum in black knot disease growths, but it was never considered a problem in cherries, because it could not enter the bark and feed on the cambium unless there was a pre-existing wound. In the 1970s, mechanical harvesting of tart cherries began in the USA, and mechanical harvesters shook the whole tree to get the cherries off and early harvesters caused very often bark damage and crushed the underlying canopy. Soon, better mechanical shakers that caused much less damage than before were developed. Also, new plant growth regulators were created that loosened the cherries to get them to drop with much less mechanical force. As a result, the population of *E. semifuneralis* decreased and the species was not considered an important pest any longer (D. Biddinger, Pennsylvania State University, pers. comm., 2026; complement, 2026-03).

Currently, *E. semifuneralis* is considered by experts as '*a little studied insect in North America, probably because of its rare occurrence as a pest*' (J. Walgenbach, North Carolina State University, pers. comm., 2026; complement, 2026-03), a species '*rarely reported*' from landscapes or nurseries in North Carolina (J.R. Baker, North Carolina State University, pers. comm., 2026; complement, 2026-03), a species that has not been recorded in the Plant Disease and Insect Clinic of the North Carolina State University since 2000 (M. Berton, pers. comm., 2026; complement, 2026-03), '*rare*' in Washington State with only two recorded infestations in last 41 years (E.H. Beers, Washington State University, Tree Fruit Research and Extension Center, pers. comm., 2026; complement, 2026-03), and '*currently not very common in commercial orchards*' and '*only a minor problem*' in California (F.G. Zalom, University of California, Davis, pers. comm., 2026; complement, 2026-03).

The pest is known to vector the fungus *Ceratocystis fimbriata* which is widely distributed in the Americas, Eurasia, Africa, and Oceania (Harrington, 2004). Larval feeding is reported as a possible means of introducing *C. fimbriata* spores long after a mechanical injury occurs (EFSA PLH Panel, 2023a citing Connell et al., 2005). The taxonomy of this species is under revision (EPPO, 2025), and disease caused by *C. fimbriata* to *Platanus* spp. trees has now been attributed to *C. platani*, a highly important and devastating pathogen (complement,

2026-03). *Platanus* spp. are also hosts for *E. semifuneralis* (see section 2.1.1.2), its potential as a vector of *C. platani* cannot be excluded.

E. semifuneralis has been recorded in southern Türkiye, provinces of Adana and Osmaniye, infesting pomegranate orchards, showing an infestation rate 36–50% in the orchards (EFSA PLH Panel, 2023a citing Atay & Öztürk, 2010). However, since 2009–2010, no additional information has been obtained regarding the spread and distribution of this pest in Türkiye, and no complaints have been received from farmers in the region regarding damage or impact caused by this pest (H. Ertaş, NPPO of Türkiye, pers. comm, 2025; complement, 2026-03).

Control. Residual insecticides (e.g. chlorpyrifos, which is no longer approved in the EU) are often applied to the trunks and scaffold limbs early in the season to control *E. semifuneralis* (EFSA PLH Panel, 2023a citing Biddinger & Howitt, 1992; Kain & Agnello, 1999; complement, 2026-03: Andika *et al.*, 2024). An insecticide based on chlorantraniliprole was recently tested against several stone fruit borers including *E. semifuneralis* and was shown to be effective (Andika *et al.*, 2024; complement, 2026-03). This active substance is currently approved in the EU (<https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/start/screen/active-substances/details/526>) and in the Russian Federation (https://www.pesticidy.ru/active_substance/chlorantraniliprole).

The sex pheromone of *E. semifuneralis* was identified and protocols for mating disruption and mass trapping have been developed (EFSA PLH Panel, 2023a citing Biddinger & Leslie, 2014; Teixeira *et al.*, 2010). However, these approaches appear to be too costly for widespread adoption, particularly given the low recent economic impact of *E. semifuneralis* (D. Biddinger, Pennsylvania State University, pers. comm., 2026; complement, 2026-03).

As regards biological control, several species have been documented as natural enemies of *E. semifuneralis*, and the natural enemy complex can suppress population of the pest (> 25%; EFSA PLH Panel, 2023a citing Biddinger & Leslie, 2014). However, so far there are no developed biological control programs against this pest.

2.2.3. Potential impact within the EPPO region

Many host plants of *E. semifuneralis*, in particular *Prunus* spp. fruit trees, are major crops in the EPPO region. Other woody species from the same genera might be also susceptible to the pest, especially in the cases when more than one host is already known in one genus. Climate in many parts of the EPPO region is considered suitable for pest development.

The potential impact within the EPPO region might be similar to that in the native range or in Türkiye.

In conclusion, in the area of potential establishment, magnitude of impact is likely to be low on cultivated and native hosts (and possibly on other woody species from the same genera),

with moderate uncertainty. Uncertainty relates to the possible persistence of plant-injuring production practices locally and the scarcity of available data.

2.2.4. Conclusions

Presence of this pest in Türkiye (EPPO, 2026; Distribution) and interceptions made in Italy (EFSA PLH Panel, 2023a; V. Kertész, EFSA, pers. comm., 2025; complement, 2026-03) have shown that *E. semifuneralis* has the potential to enter the EPPO region via trade. Climatic conditions and the availability of host plants in some EPPO member countries may allow *E. semifuneralis* to spread and develop in both cultivated hosts (e.g., apples, plums, mulberries, almonds, olives, and ornamental broadleaf trees) and wild-growing hosts.

Although *E. semifuneralis* has been already introduced into the EPPO region (Türkiye), the Panel on Phytosanitary Measures concluded that *E. semifuneralis* poses only limited risk to the region: available data on economic impact of *E. semifuneralis* are outdated and refer to earlier production systems that caused greater plant injury. Under current conditions, the species is more often referred to as part of a fruit trunk borer complex and is regarded as a secondary/opportunistic borer associated with preexisting damage or stress. Consequently the Panel decided to not recommend the addition of *E. semifuneralis* to the EPPO A1 or A2 Lists of pests recommended for regulation as quarantine pests, and therefore did not propose risk management measures.

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